Construction Trends and Related Factors

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NO OTHER industry of comparable magnitude in the United States experiences such wide fluctuations as does construction. Total construction of all types, public and private, contract and "force account" work, and alterations and repairs as well as new construction, is estimated to have had a value of more than 12 billions of dollars annually during the period from 1925 to 1929, inclusive, and to have declined to an average of about 4½ billions of dollars annually during the period from 1932 to 1935, inclusive. In 1933, the industry reached its lowest level since that prevailing at the end of the World War. The past 2 years have experienced a moderate but steady increase. In 1934, this was due primarily to the wide expansion of public construction and in 1935, to the more recent gains in private construction.

Construction work in years of moderately high activity such as 1930 required, on the construction site itself, the employment of some 2½ million men over a major part of the year. An even larger number of workers, possibly 3½ million, were dependent upon construction for their normal employment in the fabrication, manufacture, and transportation of materials and equipment. The unemployment resulting from the tremendous shrinkage in construction work over the past several years has consequently been extremely large and prolonged.

Construction Activity in 1935

The most notable development in the industry during 1935 was the sharp upturn of residential building in all parts of the United States. During each of the years 1932, 1933, and 1934, this type of building, as measured by the dollar value of residential contracts reported by the F. W. Dodge Corporation, had remained at a level equal to approximately 10 percent of the 1926

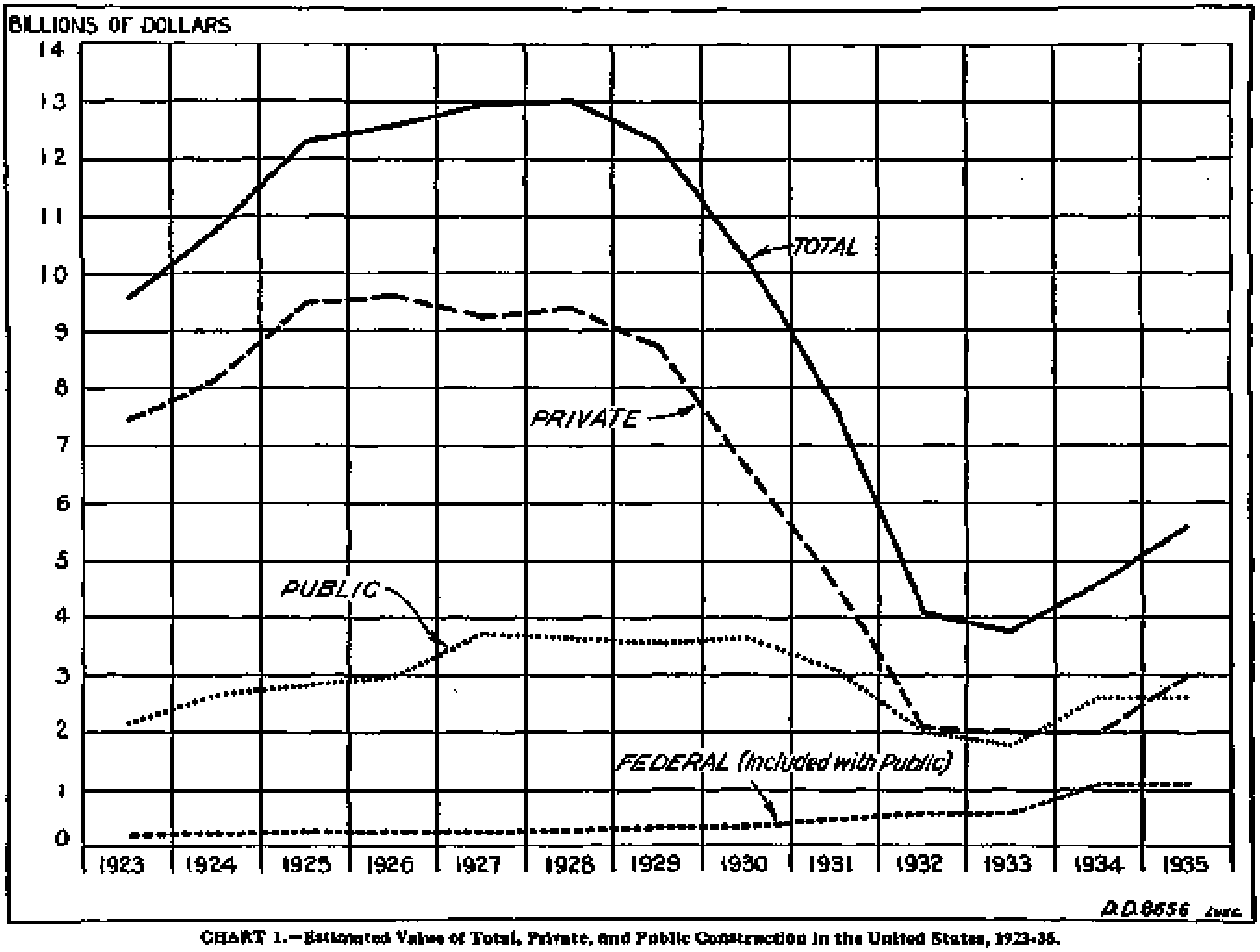

CHART 1.—Estimated Value of Total, Private, and Public Construction in the United States, 1923-35.

Source: Total, private, and public construction, 1923-32, National Bureau of Economic Research (Gayer); these figures have been extended to 1933, 1934, and 1935 on the basis of the F. W. Dodge Corporation reports. Data on Federal construction are from the Federal Employment Stabilization Board and the Treasury Department, except for 1935, which was estimated from reports of the Engineering News-Record.

average. The sharp upturn which began in March 1935, and continued with increasing strength even through December, resulted in a volume of residential building contracts in 37 eastern States of approximately $478,800,000, or 92 percent more than the total for 1934.

Building permit data, which involve some estimation but which include a larger proportion of smaller dwellings than do the contract statistics, indicate that the number of dwelling units of all kinds built in 257 identical cities reporting to the Bureau of Labor Statistics reached a low in 1934 of 6.1 percent of the average for the 10-year period from 1921 to 1930, inclusive. As indicated in the accompanying table, based upon these permit reports (extended for the years prior to 1921 in proportion to the Dodge Corporation data for residential floor space provided in 27 eastern States), this type of construction has experienced very wide fluctuations, forming a part of what appears to be a long-time cyclical fluctuation of 16 to 20 years in residential building.

Table 1.—Index of New Dwelling Units Provided, 1916–35

(1926=100)

Year	Index	Year	Index	Year	Index	Year	Index
1916	51.9	1921	45.8	1926	100.0	1931	21.2
1917	34.0	1922	81.5	1927	87.8	1932	5.6
1918	24.7	1923	98.0	1928	84.0	1933	5.6
1919	57.4	1924	95.8	1929	52.8	1934	4.8
1920	33.8	1925	100.1	1930	27.1	1935	12.1

If these long-term fluctuations which may be observed over the past hundred years or more are to repeat themselves as they have done with approximate regularity in the past, the sharp upturn in residential building this year may be expected to continue for several years. A number of favorable factors such as rising rents, increasing occupancy of dwellings, the large volume of funds of lending agencies available for investment, and lower interest rates than have prevailed for several years, tend to confirm such an expectation.

Changes in the dollar volume of other types of construction were also upward in most cases, especially for large industrial projects as reported by the Engineering News-Record, but were not equal to those in residential building. These changes have been discussed from time to time in current numbers of the Survey and may be summarized briefly for selected types as follows:

Table 2.—Activity in Specified Types of Construction in 1935 Relative to 1926, With Percentage Change From 1934

Types of construction (dollar volume) and reporting source	Percent which 1935 is of 1926	Percent change 1934 to 1935
Residential (*F. W. Dodge Corporation*)	17.9	+92
Commercial and factory (*F. W. Dodge Corporation*)	19.6	+5
Commercial and industrial (*Engineering News-Record*)	17.7	+51
Educational, hospital, religious, and recreational, public and private (*F. W. Dodge Corporation*)	33.4	+38
Utility construction, public and private (*F. W. Dodge Corporation*)	10.8	−12

Construction Finance.

In view of the long-time commitments which every construction project involves, hardly any aspect of the industry is more important than construction finance. Although far from complete, the data presented here may be found useful in indicating the present position of some of the more important elements of construction finance.

With respect to long-term interest rates and the quantity of loanable funds in the hands of banks, insurance companies, building and loan associations, and other lending agencies, the construction-capital market is in a more favorable position for borrowers than at any time in recent years. The Home Owners' Loan Corporation, by absorbing approximately 3 billions of dollars of obligations, has permitted distressed home owners to retain their homes and has removed from the market this large volume of loans. Although the operation has raised a number of difficult problems, it is generally conceded that the short-term effect upon the mortgage lending market has been wholesome. The Reconstruction Finance Corporation and the Public Works Administration have improved investment market conditions by taking over bonds and other financial obligations—especially of railroads and municipalities—which were not readily marketable but were essentially sound and which in many cases have subsequently been sold at a profit. The present condition is also due in part to such developments as the accumulation of funds at a more rapid rate than the loaning of funds, which, in terms of new capital flotations for private construction, was practically zero for many months during 1932, 1933, and 1934.

The home-loan banks and member institutions, the Federal Housing Administration, and the Reconstruction Finance Mortgage Co. assisted materially in the release of investment funds for private building during the year 1935. A final report for the year has not been prepared by the home-loan bank system, but preliminary estimates indicate that the total volume of new loans by all member associations was approximately $340,000,000, or roughly three-fourths of the loans by all savings and loan associations in the United States. This figure includes some loans for the purchase of homes already built and for the refinancing of loans held by other agencies. The amount of loans for strictly new construction by all members is not known but would appear from the data for Federal associations to have been from one-fourth to one-third of the above total, a substantial percentage increase over the preceding year. The total value of mortgage loans of the Federal savings and loan associations in 1935 was approximately $124,000,000.

The financial operations of the Federal Housing Administration are essentially of three types: The insurance of short-term notes for modernization and repairs; the insurance on a mutual basis of mortgage loans on homes; and the insurance of loans for largescale, low-cost housing developments. According to the Annual Report of the Housing Administration, short-term notes totaling $223,620,146 for modernization and repairs were insured during 1935. Approximately 95 percent of these short-term notes were in amounts of $2,000 or less. The report states also that mutual mortgage loans for new home building totaling $60,248,256 were accepted for insurance during the year 1935. Of this amount, approximately 70 percent was loaned by National and State banks and trust companies. Mortgage refinancing loans for $110,346,608 were also accepted for insurance During the year the volume of requests for insurance on low-cost housing loans was quite large, but thus far only a portion of them have been approved, and loans to the extent of $27,030,234 were actually insured in 1935.

Private capital flotations are reported by the Commercial and Financial Chronicle and other sources. None of the available series, however, disclose the new capital issues solely for construction, and the available figures frequently include funds for a wide range of uses such as working capital and machinery as well as for construction. Bond yields as reported by the Standard Statistics Company for industrials and utilities, based upon outstanding rather than new issues, are lower than they have been at any time in many years, at least since 1905 or 1906.

Life-insurance companies are normally among the largest investors in urban mortgages in the United States. In 1928 approximately one-half of the new investments by the companies (originally 25, now 47) reporting to the Wall Street Journal were in such mortgages. By 1932 the proportion had declined to slightly over 30 percent, and in 1934 dropped to the unprecedented low level of 2.7 percent. The following year, 1935, experienced a threefold increase from the 1932 figure to a total of $195,269,000. Only a portion of this amount was for new construction, but the sharp reversal of the trend of the past few years is a clear indication of a revival of interest on the part of life insurance companies in urban mortgage loans.

Vacancies, Rents, and Construction Costs.

In addition to construction financing, there are a number of other important considerations which determine the volume of construction activity. For residential building, the demand in terms of rents and vacancies is most important. Available data for a few cities in the United States indicate a level of vacancy for 1932 of 10 to 12 percent of the total number of dwelling units. This ratio has been steadily declining, and during the latter part of 1935 reached the unusually low figures of 1.8 to 3.9 percent in such cities as Denver, Cleveland, and St. Louis, for which accurate data are available. Many other cities reported a similar trend in vacancies in dwelling units. Vacancy data relating to offices, stores, and other commercial buildings, are not sufficiently extensive nor reliable to warrant any precise observation regarding the condition of the demand for such space. It appears, however, on the basis of the available information, that improvement in the occupancy of such structures has been slight.

The rent index shown in chart 2, of the National Industrial Conference Board, based upon month-to-month rent charges in 173 cities, indicates a gradual decline from a peak in the summer of 1924, followed by a somewhat steeper decrease beginning in 1931 and ending in a low point in January 1934. During 1934

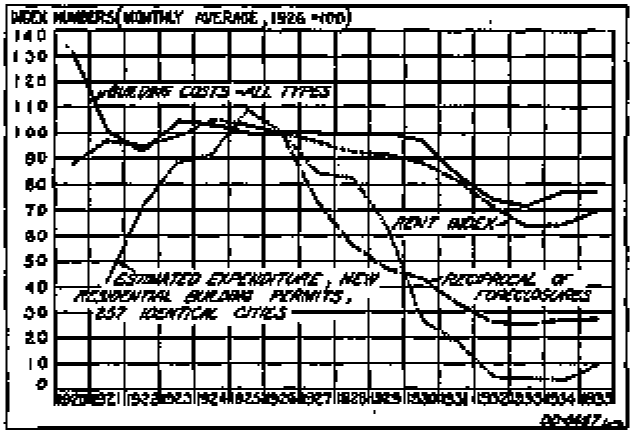

Chart 2.—New Residential Building, Rents, Building Costs and Foreclosures, 1920-35.

Source: New residential building, United States Department of Labor; Rents, National Industrial Conference Board; building costs, American Appraisal Co.; and foreclosures, Home Loan Bank Board.

and 1935 the Conference Board index has risen slowly but continuously. Since available rent indexes make no allowance for rebates, remission of rents, noncollectible items, vacancies, and certain other factors, it is quite likely that the fluctuations are somewhat moderated, and that the actual net return to property owners fell to lower levels in 1933 and is experiencing a sharper revival in 1934 and 1935, than disclosed by the indexes of rental rates. Nevertheless, the above-mentioned index is probably the nearest approach to actual rent changes at present available.

The trends in construction costs vary widely for different types of works and structures. For this and other reasons, available indexes are not always in agreement. In general, however, construction costs appear to have reached a low point some time between the second quarter of 1932 and the second quarter of 1933. Subsequently, all indexes rose sharply. During 1935, construction costs appear to have changed only slightly.

Any complete analysis of the fluctuations in this industry must be had in terms of the separate demand for various types of works and structures. This brief discussion of construction trends and related elements may serve, however, to indicate some of the major factors which are closely related to this exceedingly important problem.